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Subject: Microsoft Settlement

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Ms. Hesse,

Attached are the Comments to the Revised Proposed Final Judgment in United States v. Microsoft Corporation, No. 98-1232, submitted on behalf of Sun Microsystems, Inc.

Copies of the comments are submitted in both Word and .pdf formats. In addition, we have sent a copy via facsimile.

Please call if you have any difficulties opening or processing these attachments.

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Comments to the Revised Proposed Final Judgment in
***United States v. Microsoft Corporation*, No. 98-1232**
***State of New York, et al. v. Microsoft Corporation*, No. 98-1233**

Submitted By

Sun Microsystems, Inc.

Pursuant to the Tunney Act, 15 U.S.C. § 16

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I. *Introduction*

Microsoft illegally maintained its monopoly over Intel-compatible personal computer ("PC") operating systems by acting to undermine the distribution and commercial appeal of alternative computing platforms like Netscape Corporation's Navigator browser and Sun Microsystems, Inc.'s Java™ technology.[1] By eliminating the ability of alternative platforms to compete with Windows, Microsoft has not only maintained its monopoly over PC operating systems, it also has dramatically increased the economic power that it derives from that monopoly, such that Microsoft now has the power to control competition in a number of adjacent and downstream markets as well.

In the emerging world of networked devices and services, the commercial appeal and success of adjacent or downstream devices and services such as servers, personal digital assistants ("PDAs"), telephones, video game systems, television set-top boxes, and web-based services are in very large measure dependent on their ability to interoperate with PCs via the Internet or other networks. Microsoft's expanded monopoly power over PC operating systems and web browsers affords it the power to deny competing devices and services the same ability to interoperate fully and completely with PCs as Microsoft's networked devices and services enjoy. Microsoft is in fact exercising the power it derives from its PC monopoly in just this way to exclude competition in each of these adjacent markets. Unless and until that power is effectively checked and ultimately eliminated, Microsoft's past practices and insatiable ambition demonstrate that it will continue to destroy competition in each of these enormously important markets.

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[1] *United States v. Microsoft Corp.*, 253 F.3d 34, 46 (D.C. Cir. 2001) ("*Microsoft III*").

Unfortunately, the Revised Proposed Final Judgment ("RPFJ") does little or nothing to eliminate the unlawful monopoly maintained by Microsoft over PC operating systems. Nor does it redress the harm that Microsoft's illegal acts have caused to competition in that market. And while the RPFJ apparently recognizes the threat to competition posed by Microsoft's exclusionary behavior in adjacent and downstream markets, the remedies it proposes to redress this threat are plagued with so many loopholes and ambiguities that there can be no assurance that Microsoft's anticompetitive conduct will stop.

A. Competition in the market for PC operating systems must be restored

The adjudicated facts establish that Microsoft illegally maintained a monopoly over the market for PC operating systems by undermining the ability of rival software platforms to compete in that or closely related markets. By offering consumers the ability to run compelling applications on operating systems other than Microsoft's Windows operating system, the Navigator browser and Java platform threatened to reduce or eliminate the applications barrier to competition that sustains Microsoft's monopoly.[2] Microsoft fully recognized the threat these middleware platforms posed to its continued monopoly over PC operating systems and contrived to maintain that monopoly by restricting consumer access to these and any other non-Microsoft middleware platforms.

The commercial appeal of any computing platform is dependent in very large measure on the numbers of consumers who own or use the platform. The greater the number of users, the greater the demand for applications capable of running on that platform. The greater the demand for applications, the greater the number and variety of applications developed for the platform.

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[2] *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, § 68 (D.D.C. 2000) ("*Findings of Fact*") (explaining how middleware technologies such as the Navigator browser and the Java platform have the ability to weaken the applications barrier to entry).

And the greater the number and variety of applications developed for a platform, the greater the consumer demand for a given computing platform.[3] Once started, this "feedback" effect can and will sustain the adoption and commercial success of platform software, such as Microsoft's Windows operating system, Netscape's Navigator browser or Sun's Java platform. The key to successful competition in platform software is thus distribution.[4] Unless a platform enjoys widespread and sustained distribution, such that large numbers of computer users have the platform installed and available for use on their computer systems, the feedback cycle of application development and platform adoption will not take effect.

As the District Court found, and the Court of Appeals affirmed, Microsoft engaged in a series of illegal acts to choke off the distribution channels for the Navigator and Java platforms.[5] By restricting and disrupting the distribution of the Navigator browser and the Java platform, Microsoft sought to limit the numbers of computer users with access to these alternative platforms and thereby also limit the demand for, and economic incentives supporting, application development on the Navigator and Java platforms. By decreasing the distribution of non-Microsoft platforms, such as the Navigator browser and the Java platform, Microsoft knew that it could also decrease the number and variety of applications developed for such platforms, and thus their relative commercial appeal to consumers.

But for Microsoft's unlawful attack on the distribution of the Navigator and Java platforms, the installed base of these alternative platforms would have been very different today. So too would the economic incentives and choices of consumers and software developers.

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[3] *See Findings of Fact*, 84 F. Supp. 2d at §§ 39-40.

[4] *See Microsoft III*, 253 F.3d at 55-60, 60-61, 70-71; *Findings of Fact*, 84 F. Supp. 2d at §§ 36-52, 143-44.

[5] *See Microsoft III*, 253 F.3d at 61, 72, 75-76; *Findings of Facts*, 84 F. Supp. 2d at §§ 357, 395-402.

Consumers would have had the opportunity to choose among a variety of competing platforms – not just Microsoft's Windows platform – based upon performance, cost or personal preference. Developers too would have had the opportunity to choose among a variety of competing platforms on which to develop applications with the features, performance and cost that consumers demand.

Indeed, because the Navigator and Java platforms were "cross-platform" – that is, ran on top of a variety of operating systems, not just Microsoft's Windows operating system – consumers would have had the ability to run applications written for the Navigator browser and Java platform on any operating system, not just Microsoft's Windows operating system. By dramatically lowering the cost to switch applications from one operating system to another, the Navigator and Java platforms directly attacked the applications barrier to competition that protects Microsoft's monopoly over PC operating systems, and greatly reduced the cost to consumers and developers alike of switching away from Microsoft's monopoly platform. In short, but for Microsoft's anticompetitive conduct, consumers today would have enjoyed far greater freedom, at far less cost, to choose among competing operating systems based on their comparative features, performance, and price, rather than simply the number of applications they support.

B. Microsoft's unlawful power to exclude competition in adjacent and downstream markets must be stopped and eventually dissipated

By disrupting and eliminating the distribution of competing platforms, Microsoft has not only maintained its monopoly over PC operating systems, it also has increased the economic power that it derives from that monopoly. By secretly manipulating the interfaces and protocols needed to interoperate with Windows, Microsoft can control which products and services in adjacent or downstream markets are capable of interoperating with PCs. Not only does this

permit Microsoft to enhance the relative appeal and functionality of its products and services at the expense of its competitors, it denies consumers the benefits of competition. Instead of choosing a server, telephone, application, or web service based solely on its competitive merits, Microsoft is increasingly forcing consumers to purchase such products and services based upon their ability to interoperate with its unlawfully monopolized platforms.

Microsoft is now abusing the power it has over PC operating systems and web browsers by seeking to extend its control to embrace any device, application, or web service that seeks to interoperate with Microsoft's monopolized PC operating systems or browsers. Microsoft's unbridled monopoly over a critical node on the digital network – PCs – provides it the power to allow only such servers, PDAs, telephones, television set-top boxes, videogame systems, or web services that implement Microsoft's proprietary interfaces and protocols to interoperate effectively with Microsoft's monopoly products. By illegally exploiting its PC operating system monopoly to acquire and utilize a chokehold over networked connections to PCs, Microsoft is dramatically expanding its power to deny consumers the benefits of choice and competition in adjacent and downstream markets as well.

C. The RPFJ fails to remedy the monopoly illegally maintained by Microsoft

In the face of this record, the law requires that any remedial decree "terminate" the monopoly, "unfetter" the market from anticompetitive conduct, "deny to the defendant the fruits" of its illegal acts, and "ensure" no repetition of such abuse in the future.[6] Measured against this standard, the proposed settlement between the United States and Microsoft reflected in the RPFJ falls far short.

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[6] *Microsoft III*, 253 F.3d at 103.

Rather than act directly to restore competition to the market for PC operating systems, and redress the harm to competition inflicted by Microsoft's past misconduct in that and adjacent markets, the RPFJ actually accedes to Microsoft's monopoly, and does little or nothing to eliminate or check the enormous power it provides. Incredibly, the RPFJ barely proscribes behavior already held to be unlawful without remedying the far-reaching and continuing anticompetitive effects that have been caused by that behavior.[7] Even though Microsoft effectively destroyed competition for web browsers and blocked the distribution of upgraded, compatible versions of the Java platform for the PC, the RPFJ fails to remedy directly these anticompetitive acts or disgorge Microsoft of the power it now enjoys as a result of those acts.

Instead, the RPFJ relies on Microsoft's partners – PC manufacturers – to indirectly undermine Microsoft's monopoly by distributing non-Microsoft middleware. Relying on Microsoft's distributors to achieve the Department's goals is fundamentally flawed, since the PC manufacturers have little or no economic incentive or ability to work with Microsoft's competitors, absent fundamental changes to the competitive landscape in the PC operating system market, which the RPFJ fails to seek.[8] At best, the RPFJ will marginally increase the opportunity, but not the ability, of competitors to compete at some future date with Microsoft's middleware products. It does nothing directly to dislodge Microsoft's PC operating system monopoly or to restore the market for PC operating systems to the competitive dynamics the market would have possessed "but for" Microsoft's illegal conduct.

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[7] *See Schine Chain Theatres, Inc. v. United States*, 334 U.S. 110, 128 (1948) (concluding that injunctive relief which merely "forbid[s] a repetition of the illegal conduct" is legally insufficient because defendants would "retain the full dividends of their monopolistic practices and profit from the unlawful restraints of trade which they inflicted on competitors").

[8] *Findings of Fact*, 84 F. Supp. 2d at § 54 (stating that "[w]ithout significant exception, all OEMs pre-install Windows on the vast majority of PCs that they sell, and they uniformly are of a mind

D. *The loopholes in the RPFJ must be eliminated and its important ambiguities clarified*

While promising in principle, the disclosure remedies in the RPFJ (Sections III.D. and III.E) are likely to fail in practice to achieve the procompetitive objectives identified by the United States Justice Department (the "Department") in its Competitive Impact Statement. Key provisions in the RPFJ contain critical loopholes and glaring ambiguities. Given Microsoft's past disdain for compliance with the strictures of its prior antitrust consent decree with the Department, these ambiguities will likely lead to future litigation, particularly since Microsoft has repeatedly refused to answer any questions regarding whether it agrees or disagrees with the interpretations of the RPFJ proposed by the Department in the Competitive Impact Statement. Instead, it is clear that Microsoft's strategy is to say as little as possible about the meaning or application of the RPFJ prior to entry of judgment, hoping that any ambiguities in the language will ultimately be interpreted in its favor. In order to protect the public and ensure that the Department has actually secured a settlement that is consistent with its representations to the Court, the Department must force Microsoft to identify any disagreements that it has with the Department's interpretations ***prior*** to entry of the judgment. Unless such minimal steps are taken, the RPFJ will certainly fail to secure even the modest objectives it seeks to attain.

The RPFJ is further flawed because it allows Microsoft to profit from its illegal acts by exacting royalties as a condition for making interoperability disclosures. Moreover, it gives Microsoft far too much discretion about how it will "comply" with the RPFJ. Given its past record of anticompetitive conduct, a remedial scheme which relies on Microsoft acting "reasonably" is doomed to fail. After having successfully prosecuted its case against Microsoft,

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that there exists no commercially viable alternative to which they could switch in response to a substantial and sustained price increase or its equivalent by Microsoft.").

it would be tragic for the Department to shirk its duty under the law, and through entry of the RPFJ, allow Microsoft to maintain and expand its monopoly power.

II. Sun Microsystems' Interest Regarding the Terms of the RPFJ

Since its founding in 1982, Sun has been propelled by an innovative vision – "The Network Is The Computer."™ Sun is a leader in the design, manufacture, and sale of computer hardware, software, and services. Sun directly competes with Microsoft across a wide variety of markets including operating systems, "middleware" platforms, software development tools, office productivity suites, directory services, and enterprise software.

Sun's experience and expertise place it in a unique position to assess the true competitive impact of the RPFJ. As one of Microsoft's leading competitors and as the creator and licensor of the Java platform, Sun was a prime target of the anticompetitive conduct at issue in *United States v. Microsoft*. In addition, because Sun designs, manufactures, and sells a wide variety of products and services that must interoperate with Microsoft's products and services, Sun's real-world experience regarding the difficulties and barriers to effective interoperability with Microsoft's products affords Sun unique insights into whether the various technical disclosures and licensing practices mandated under the RPFJ will actually achieve the results intended by the Department.

Sun's comments on the RPFJ are not intended to be exhaustive. Instead, the comments focus on key shortcomings or problems with the RPFJ, which most directly impact Sun, its distributors, developers, and customers. Others, including trade organizations of which Sun is a member, are likely to raise additional problems with the RPFJ, which should be addressed prior to entry of the judgment. By omitting such subjects from its submission, Sun does not wish to convey to the Department the impression that it believes the remainder of the RPFJ is

satisfactory to Sun. Rather, Sun has merely focused its comments to highlight particular areas of concern.

III. The RPFJ Fails To Remedy the Continuing Harm to Competition Caused By Microsoft's Illegal Acts

A. The RPFJ fails to dissipate Microsoft's monopoly power in the market for PC operating systems

A remedies decree in an antitrust case "must seek to unfetter a market from anticompetitive conduct, to terminate the illegal monopoly, deny the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future."[9] The market over which Microsoft has unlawfully maintained its monopoly power is the market for PC operating systems. It is that market – the market for PC operating systems – that must be restored to competition, and in which Microsoft's power must be eliminated.

The RPFJ, however, fails to serve this fundamental objective. The first and most important flaw in the RPFJ lies in its failure to do anything to restore competition in the market for PC operating systems. But for Microsoft's anticompetitive conduct, the market would today provide consumers and software developers with the benefits of competitive choice among at least three alternative computing platforms for desktop computers: the Windows operating system, the Navigator browser, and the Java platform. As a direct result of Microsoft's anticompetitive conduct, consumers and developers today effectively enjoy no such choice. Rather than restore the market to the state it would have enjoyed but for Microsoft's illegal conduct, or even attempt to dissipate Microsoft's illegally maintained power over that market,

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[9] *Microsoft III*, 253 F.3d at 103 (internal quotations and citations omitted). Although the Department acknowledges the required remedial objectives under the law, it fails to achieve them in practice. *See* Competitive Impact Statement ("CIS") at 24 ("Appropriate injunctive relief in an antitrust case should: (1) end the unlawful conduct; (2) 'avoid a recurrence of the violation' and others like it; and (3) undo its anticompetitive consequences.").

the RPFJ accedes to and accepts Microsoft's monopoly over PC operating systems, and does nothing to directly and immediately restore that market to competition.

Indeed, the RPFJ does not even focus its principal remedies on the relevant market: the market for PC operating systems. Instead, it focuses its principal remedies on entirely different markets: the market for distribution of Microsoft operating systems and the market for middleware. In light of the record established and affirmed in this case, the Department's reliance on Microsoft's own distributors – entities whose commercial viability is dependent on and inextricably tied to Microsoft's success – to promote non-Microsoft middleware products capable of threatening Microsoft's monopoly position is misplaced at best, and foolhardy at worst.

1. The Department previously acknowledged that an effective remedy had to eliminate the applications barrier protecting Microsoft's monopoly

In recognition of the Department's obligations under the law and the extent of Microsoft's misconduct, the Department originally set its remedial objectives much higher than those proposed in the RPFJ. In fact, both the Department and the District Court concluded that a combination of structural relief and conduct remedies was necessary to lower the applications barrier to entry and to restore competition in the market for PC operating systems.[10] As the Department itself acknowledged, conduct remedies, by themselves, are likely to be insufficient in this case to remedy the past harm to competition:

> [C]onduct remedies can do little to rectify the harm done to competition by Microsoft's illegal conduct in the past. For example, the evidence shows and the Court found that Microsoft's illegal conduct prevented Navigator and Java from eroding the applications barrier to entry "for several years, and perhaps permanently" because they could not facilitate entry unless they became almost

[10] *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000), *aff'd in part, rev'd in part, and remanded*, 253 F.3d 34 (D.C. Cir. 2001).

> ubiquitous and thus became attractive platforms for ISVs. A conduct remedy cannot undo the demise of Navigator and the concomitant rise of Internet Explorer, nor can it ensure that there will be other middleware threats comparable to Navigator in the future.[11]

According to the Department, "[c]ompetition was injured in this case principally because Microsoft's illegal conduct raised entry barriers to the PC operating system market by destroying developments that would have made it more likely that competing operating systems would gain access to applications and other needed complements."[12] Thus, "the key to a remedy in this case is to reduce Microsoft's ability to erect or maintain entry barriers."[13] To achieve this objective, the Department originally sought to divide Microsoft into an Applications Business and an Operating Systems Business in order to "create incentives for Microsoft's Office and its other uniquely valuable applications to be made available to competing operating systems when that is efficient and profitable – in other words, in response to ordinary market forces – instead of being withheld strategically, at the sacrifice of profits and to the detriment of consumers – in order to protect the Windows operating system monopoly."[14]

But now that the Department has reversed its prior position and seeks to rely solely on conduct remedies, the remedies it has proposed are even less likely to rectify the harm done to competition than the interim conduct remedies previously adopted by the District Court. The conduct remedies of the RPFJ are simply not tailored to rectify the continuing harm or lower the barriers to competition for competing operating system vendors. For example, the RPFJ does not even attempt to redress the competitive harm caused by Microsoft's interference and disruption of the distribution channels for the Navigator browser or the Java platform, even though

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[11] 4/28/00 Plaintiffs' Memo. in Support of Proposed Final Judgment at 7-8 (citations omitted).

[12] *Id.* at 30.

[13] *Id.*

Microsoft correctly perceived that widespread distribution of these platforms would lower the barriers to competition protecting its monopoly. Nor does the RPFJ take any direct steps to loosen Microsoft's chokehold on the PC operating system market and facilitate the development of applications from both Microsoft and others that could run on competing operating systems. If, as the Department previously contended, the "key to a remedy" in this case is to reduce or eliminate Microsoft's ability to create and maintain barriers to competition, the RPFJ does not attempt to serve, much less achieve, that remedial objective.

Although the Court of Appeals vacated and remanded the District Court's divestiture order, it affirmed the central liability findings against Microsoft. Rejecting Microsoft's numerous challenges, the Court of Appeals concluded that Microsoft had monopoly power over the PC operating system market, that Microsoft's monopoly was protected by an applications barrier to entry, and that Microsoft engaged in a panoply of illegal acts to maintain that monopoly in light of the competitive threat posed by the Navigator browser and the Java platform.[15] Furthermore, it set forth the legal standard against which any remedy for such violations should be measured.[16]

While the Department certainly had discretion to choose not to pursue a divestiture remedy on remand, the Court of Appeals' affirmance of the core liability findings against Microsoft provided no excuse for seeking watered-down conduct remedies that are likely to be even less effective than the interim conduct remedies previously ordered by the Court. This is not a case where the Department entered into a settlement with a defendant in lieu of trial. Here, the District Court held, and the Court of Appeals affirmed, that Microsoft violated the antirust

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[14] *Id.*

[15] *Microsoft III*, 253 F.3d at 51, 60, 64, 71, 76-78.

[16] *Id.* at 103.

laws. By failing to remedy the effects of Microsoft's illegal acts, disgorge Microsoft's ill-gotten gains, and attack the barriers to competition protecting Microsoft's monopoly, the Department has shirked its duty under the law.

2. The RPFJ fails to address the effects of Microsoft's distribution power

Any remedy designed to restore competition in the PC operating system market must account for the economic realities of software platform development. Distribution is the key to competitive viability in the market for PC platform software.[17] The applications barrier to entry which forms a "positive feedback loop" for Microsoft and a "vicious cycle" for Microsoft's competitors was a centerpiece of the Department's case: the number of installed units of a platform determines its commercial appeal to applications developers; the number and variety of applications available for a platform determines its commercial appeal to consumers; and the commercial appeal of the platform to consumers in turn drives its installed base and market share.[18] As the Court of Appeals concluded, "[b]ecause the applications barrier to entry protects a dominant operating system irrespective of quality, it gives Microsoft power to stave off even superior new rivals."[19] In large measure, the Navigator browser and the Java platform threatened Microsoft's monopoly because they had achieved widespread distribution on both Windows and non-Windows platforms, thereby becoming a potentially more attractive platform for application development than Windows. If developers increasingly chose to develop their applications to the Navigator and Java platforms, rather than the Windows platform, consumers would have greater

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[17] *See Microsoft III*, 253 F.3d at 55-56, 60-61, 70-71; *Findings of Facts*, 84 F. Supp. 2d at §§ 36-52, 143-44.

[18] *Findings of Fact*, 84 F. Supp. 2d at §§ 39-40.

[19] *Microsoft III*, 253 F.3d at 55-56.

freedom to switch away from the Windows operating system because they would still be able to run the applications that they desire using competing operating systems.

To restore competition in the PC operating system market, an appropriate remedy should attempt to place the market back in the position it would have been "but for" Microsoft's illegal conduct. In other words, an appropriate remedy would ensure, to the extent possible, that alternative platforms achieve the distribution that they would have received "but for" Microsoft's illegal conduct. Moreover, an appropriate remedy also would seek to open up Microsoft's distribution channels to expand consumer choice by ensuring that alternative platforms could compete on the merits with Microsoft's products, rather than having Microsoft's illegally maintained distribution powers effectively foreclose such choices.

To evaluate the potential efficacy of the RPFJ, one must compare the competitive landscape before and after Microsoft's illegal acts. Prior to Microsoft's acts, the marketplace was undergoing dramatic changes as a result of the nearly simultaneous emergence of both the Navigator browser and the Java platform. By easily connecting consumers to resources across the Internet and providing a new platform for software development, these new, widely-distributed platforms threatened Microsoft's monopoly power because they afforded consumers the ability to run applications on many different operating systems, not just Windows. Customers could chose between different browsers as well as different implementations of the Java platform. They were not reliant on a single vendor for their platform software. At this inflection point in the market, the barriers to competition protecting Microsoft's monopoly looked increasingly precarious.

Microsoft's internal documents demonstrate how serious that threat really was. Despite its dominant market position, Microsoft believed it was necessary to engage in a campaign of

illegal conduct to crush this competition. As a result of that conduct, consumers no longer have any real competitive choices for browsers for PCs, other than Microsoft's Internet Explorer. As a practical matter, PC consumers also have been denied access to the latest, compatible versions of the Java platform as a result of Microsoft's conduct. Instead, Microsoft first offered an incompatible version of the Java platform, and now seeks to roll-out their "knock-off" middleware runtime, the .NET Framework/Common Language Runtime, that copies many of the features of the Java platform with one critical difference – it runs only on Windows.

The question that should be asked regarding the RPFJ is whether it will disgorge from Microsoft the fruits of its illegal acts and restore a competitive marketplace where consumers will have the ability to choose their platform software from an array of competitive choices. A critical review of the RPFJ makes plain it does not.

3. The RPFJ does little more than attempt to enjoin Microsoft from continuing to engage in the conduct already found to be unlawful

Rather than attempting to undo the damage to competition resulting from Microsoft's actions and pry open the PC operating system market to competition, the RPFJ is purely forward-looking, focusing primarily on the precise Microsoft conduct already found to be unlawful.

Injunctive relief which simply "forbid[s] a repetition of the illegal conduct" is insufficient under Section 2 because it would allow Microsoft to "retain the full dividends of [its] monopolistic practices and profit from the unlawful restraint of trade which [it] had inflicted on competitors."[20] As the Supreme Court has made plain, an antitrust remedy "does not end with

[20] *Schine*, 334 U.S. at 128.

enjoining continuance of the unlawful restraints" but must also seek to undo the effects of the illegal acts and ensure that they do not reoccur.[21]

Most of the RPFJ is oriented towards prohibiting a narrow set of future illegal conduct by Microsoft. For example, the RPFJ contains provisions which would prohibit Microsoft from:

- retaliating against distributors of or developers for Non-Microsoft Operating Systems and Non-Microsoft Middleware (Sections III.A and III.F);
- entering into certain restrictive agreements relating to the distribution of or development for Non-Microsoft Operating Systems and Non-Microsoft Middleware (Sections III.C, III.F.2, III.G); or
- preventing end-users and OEMs from enabling non-Microsoft Middleware Products over Microsoft Middleware Products (Section III.H).

Although such provisions are certainly appropriate in light of Microsoft's past conduct, they merely enjoin Microsoft from continuing to break the law in the future, and do nothing to repair the damage to competition caused by Microsoft's past acts.

4. The RPFJ assumes that Microsoft's Windows distributors will promote competitive middleware products

Sun questions whether the Department's reliance upon Microsoft's primary distributors, PC manufacturers, to re-start competition in the PC operating system market is fundamentally misplaced. In its Competitive Impact Statement, the Department contends that the RPFJ will "restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings."[22] The Department's assumption seems to be that by giving PC manufacturers greater contractual freedom to distribute non-Microsoft Middleware Products, a rich market of competing middleware products will arise that could eventually give rise to alternative computing platforms capable of undermining Microsoft's application barrier to entry.

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[21] *See United States v. Paramount Pictures*, 334 U.S. 131, 171 (1948).

[22] CIS at 3.

The RPFJ, however, does nothing to ensure that such alternative platforms are actually distributed to consumers. If PC manufacturers choose not to distribute such software, consumers will never have the choice that they had, prior to Microsoft's illegal acts, when alternative platforms like the Navigator browser or the Java platform were ubiquitously distributed. The key question then is whether PC manufacturers will aggressively distribute non-Microsoft platforms. Unfortunately, the Department's Competitive Impact Statement offers no explanation or empirical evidence to support this critical assumption.

Given the limited nature of the relief proposed in the RPFJ, Sun is not as sanguine as the Department about such prospects.

First, despite the retaliation restrictions contained in the RPFJ, because Microsoft's market power is left largely untouched and PC manufacturers remain dependent solely on Microsoft for a critical component for their products, it is very likely that, in practice, many PC manufacturers will remain reluctant to risk incurring Microsoft's wrath by supporting competing platforms. Microsoft simply retains too many formal and informal tactics to reward its "friends," and punish its "enemies." One need only look at PC manufacturers' treatment of Microsoft's Internet Explorer for guidance on how the terms of the RPFJ are likely to be applied in practice. In July 2001, Microsoft announced that PC manufacturers, for the first time, would be free to remove access to Internet Explorer. Since that time, not one PC manufacturer has removed the Internet Explorer icon from retail PCs.

Second, under the terms of the RPFJ, competing middleware vendors are at such a competitive disadvantage to Microsoft that it will remain extremely difficult to secure distribution of these competing products through PC manufacturers. Under the RPFJ, Microsoft's ability to bundle middleware products into its Windows operating system would

remain essentially unfettered. PC manufacturers would have the legal right to remove or disable certain Microsoft middleware products, but what commercial incentive will the PC manufacturers have to remove or disable the Microsoft products if they have already paid for such products in order to license the Windows operating system? Moreover, while Microsoft retains the ability to bundle its middleware product (*e.g.*, a browser, media player, etc.) into every copy of Windows (absent an affirmative act by a PC manufacturer to exclude such product), a competitor would have to individually approach scores, if not hundreds, of different PC manufacturers around the world and negotiate a separate agreement with each to achieve a comparable degree of distribution. In addition, because the marginal cost to the PC manufacturer for the bundled Microsoft middleware product is effectively zero, PC manufacturers may be reluctant to pay non-Microsoft middleware vendors a sufficient price to recoup the costs such middleware vendors would incur to make and sell competing products.

Finally, since the vast majority of PC manufacturers are in the business of selling Windows PCs, some manufacturers might believe it is against their own commercial interests to support alternative middleware platforms. For example, if a middleware platform (*e.g.*, the Java platform) truly lowers barriers to entry and allows consumers to run applications on any operating system (*e.g.*, Apple Mac operating system, etc.) that supports that middleware platform, consumers eventually might chose to purchase their computers from vendors other than Windows PC vendors. Thus, the RPFJ fails to account for the fact that many PC manufacturers may derive substantial benefit from maintaining the applications barrier to entry protecting Microsoft's Windows monopoly.

B. The RPFJ does not remedy the continuing competitive harm to web browsers

Prior to Microsoft's illegal campaign, Netscape's Navigator browser was the market leading web browser by a wide margin.[23] Today, Microsoft's Internet Explorer browser dominates the market, accounting for over 87% of all users.[24] To achieve this dramatic turn of events, the District Court found, and the Court of Appeals affirmed, that Microsoft engaged in a series of unlawful, anticompetitive acts:

- Exclusionary contracts with OEMs,[25] IAPs,[26] and ISVs;[27]
- Commingling of software code to make it technologically difficult to remove Internet Explorer from Windows;[28]
- Anticompetitive deals with Apple Computer.[29]

Not only did Microsoft effectively destroy Navigator as a viable alternative platform, by seizing control over the web browser, Microsoft greatly expanded its market power. By dominating web browsers and effectively excluding all competitors, Microsoft secured the power to set and control the protocols and interfaces used for connecting with and communicating over the Internet.

Imagine, for example, that a single company monopolized the manufacture and supply of telephones, such that it supplied 95% of the world's telephones. If that company were permitted to change the dial tone on its phones, or the keypad, in ways that permitted only phones made by

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[23] *See Findings of Fact*, 84 F. Supp. 2d at § 360.

[24] 2/21/01 StatMarket Report Regarding Global Browser Usage Share.

[25] *See Microsoft III*, 253 F.3d at 64.

[26] *See id.* at 71.

[27] *See id.* at 72.

[28] *See id.* at 67.

[29] *See id.* at 74.

it to call and interact with its installed base of telephones, the telephones made and sold by its competitors would have very little or no value, since they could no longer interoperate effectively with 95% of all telephones. And if that company also altered the telephones it made so that they worked best – or indeed only – with the telephone switches and answering machines that the monopoly telephone company also made, then that company would quickly obtain a monopoly over the telephone switch and answering machine markets as well.

Microsoft's control over the browser and PC operating system provides Microsoft with just such unbridled power to dictate unilaterally the interfaces and protocols by which other devices and applications can interoperate with Microsoft's products and services over the Internet. The role played by the browser in communicating with devices, applications, and web services over the Internet is directly analogous to the role played by the consumer telephone in the telephone network.

As a result of Microsoft's illegal acts, Microsoft can now exclude competing products and services from being able to communicate over the Internet with Microsoft's browser, or Microsoft can mandate interfaces and protocols which favor its products over competitors' products. Thus, by virtue of its anticompetitive conduct, Microsoft has secured the power to potentially appropriate a public asset of immeasurable value – the Internet – through use of proprietary interfaces and protocols.

Control of the browser also was essential to protecting Microsoft's PC operating system monopoly. By controlling this "killer application," Microsoft can determine which competing operating systems, if any, will be able to run Internet Explorer. Without first-rate browser support capable of communicating with the content available across the Internet, competing PC

operating systems simply will not be able to attract consumers away from Microsoft's monopoly operating system.

Finally, control of the browser was important in order for Microsoft to be able to control a key distribution channel for middleware that potentially threatened Microsoft's monopoly. Browsers have been a vital distribution channel for a variety of middleware products, including the Java platform, media players, instant messaging products, etc. If Microsoft did not control this distribution channel, competitors could have continued to use competing browsers as a vehicle for distributing non-Microsoft middleware.

Consequently, the continuing competitive harm flowing from Microsoft's unlawful conduct is substantial. The RPFJ, however, does nothing directly to address it. Instead, it leaves Microsoft to enjoy the spoils of its illegal conduct. At best, the RPFJ attempts to make it easier for PC manufacturers to now distribute competing browsers. But given the dominant position that Internet Explorer has now achieved, who will develop and market a competing browser? Because Microsoft bundles Internet Explorer with its monopoly operating system, a competitor would have to compete against a product with a marginal cost to PC manufacturers and consumers of essentially zero, since Microsoft can recoup its costs from its monopoly products. Even if the competing browser were technically superior, Microsoft can regularly introduce new interfaces and protocols to interfere with the competing browser's ability to compete, forcing the competitor to chase each new proprietary standard Microsoft announces.

Unless Microsoft is first stripped of the fruits of its illegal conduct, real competition in the browser market is unlikely to occur. Absent such remedial relief, it is akin to holding a 100-yard dash in which Microsoft has an 87-yard lead after jumping the gun and intentionally tripping all of its competitors. Consumers are directly harmed as a result. Instead of a

marketplace offering many different browser choices, consumers are increasingly faced with only one choice – Microsoft's browser.

C. The RPFJ does not remedy the substantial harm to competition caused by Microsoft's illegal acts against the Java platform

The District Court found, and the Court of Appeals affirmed, that Microsoft engaged in numerous anticompetitive acts directed against the Java platform:

- Exclusionary ISV deals;[30]
- Anticompetitive threats to Intel to stop Java platform development;[31]
- Deceiving developers into using Microsoft's incompatible implementation of the Java platform;[32]
- Blocking distribution of Netscape Navigator – a prime distribution channel for the Java platform to PCs.[33]

Prior to Microsoft's anticompetitive acts, Sun had secured two major distribution channels for delivering the Java platform to PCs – Netscape's Navigator browser and Microsoft's Internet Explorer browser and Windows operating system. By its illegal acts, Microsoft effectively blocked the distribution of compatible, upgraded versions of the Java platform through both channels, and substantially slowed the development of desktop applications written to the Java platform.

First, by blocking distribution of Netscape Navigator and dramatically reducing its market share, Microsoft effectively closed this alternative channel for distributing compatible versions of the Java platform to PCs. Second, by developing and distributing its own

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[30] *See id.* at 76.

[31] *See id.* at 78.

[32] *See id.* at 77.

[33] *See Findings of Fact*, 84 F. Supp. 2d at § 397 (explaining how Microsoft used some of its "surplus monopoly power" to suppress distribution of Netscape Navigator and inflict further competitive damage on the distribution of the Java platform).

incompatible version of the Java platform which was tied to Windows, Microsoft fragmented the Java platform in order to re-create its applications barrier to entry, ensuring that PC consumers only had Microsoft's version of the Java platform. By refusing to distribute compatible upgrades of the Java platform, Microsoft effectively froze desktop development for the Java platform by continuing to distribute an "old" version of the technology, which did not have the richer set of functionality available in later versions. Finally, by means of exclusionary deals, threats, and incompatible developer tools, Microsoft attempted to either deceive or coerce developers away from developing compatible applications written to the Java platform that could run on operating systems other than Windows.

Since the trial, Microsoft has continued to attack the Java platform to the detriment of consumers. In its most recent version of Windows, Windows XP, Microsoft no longer included even the old version of the Java platform which it previously had been shipping as part of Windows in accordance with the terms of a settlement agreement with Sun. As a result, millions of consumers purchasing Windows XP will no longer be able to access web pages that contain applications written to the Java platform unless they engage in a time-consuming download of the entire Java platform.

In addition, Microsoft recently unveiled its own competing middleware runtime – the .NET Framework – as part of its .NET initiative. During the time that Microsoft effectively halted the development and distribution of the Java platform for the PC for several years, it simultaneously was busy developing its own middleware runtime that copied the design and architecture of the Java platform with one glaring difference – the .NET Framework runs only on Windows. Thus, not only did Microsoft's illegal conduct allow it to blunt the competitive threat which the Java platform posed to Microsoft's Windows monopoly, it also allowed Microsoft the

time to try and catch up with many of the compelling features that, at the time, only the Java platform offered.

The RPFJ, however, does not seek to remedy the continuing competitive harm caused by Microsoft's actions. For example, the RPFJ does nothing to attempt to put the marketplace in the position it would have been "but for" Microsoft's conduct – ubiquitous distribution of an upgraded, compatible Java platform on top of every Windows operating system as an available, alternative platform for software applications. Nor does it account for the time-to-market advantage that the Java platform lost as a result of Microsoft's conduct, particularly now that Microsoft will attempt to compete against the Java platform with its .NET Framework.

Instead of attempting to undo this damage to competition, the RPFJ would allow Microsoft to bundle its competing .NET Framework with Windows, while forcing Sun and its licensees to try and re-create the distribution channels that Microsoft unlawfully destroyed. Absent real remedial relief, Microsoft will continue to reap the benefits of its unlawful conduct, and consumers will have no meaningful alternative computing platform available on PCs that is not controlled by Microsoft.

IV. Critical Terms In The RPFJ Are Undefined or Ambiguous

A. Significant ambiguities in the RPFJ must be cured to avoid further litigation

The dispute between Microsoft and the Department regarding the prior consent decree demonstrates the need to carefully define technical terms to avoid future litigation and ensure the parties agree with respect to Microsoft's obligations. As the Department is well aware, the 1995 consent decree with Microsoft prevented Microsoft from requiring PC manufacturers to license other products as a condition of licensing the Windows operating system.[34] However, the

[34] *See United States v. Microsoft Corp.*, 980 F. Supp. 537, 539 (D.D.C. 1997).

consent decree specified that this obligation did not "prohibit Microsoft from developing ***integrated products***," though the term "integrated products" was left undefined.[35]

In 1997, the Department asked the District Court to find Microsoft in contempt for requiring PC manufacturers who licensed the Windows operating system to also license Internet Explorer. Although the District Court found that the Department's proposed definition was probably correct, the court declined to find Microsoft in contempt because Microsoft offered a "plausible interpretation," and any ambiguities had to be resolved in Microsoft's favor.[36]

Given that any ambiguities are likely to be resolved in Microsoft's favor in any future enforcement proceeding, Sun believes it is essential that any and all material ambiguities be clarified ***prior*** to the entry of the RPFJ.

Although the Department offers its own interpretation of some of the RPFJ's ambiguous terms in the Competitive Impact Statement, Microsoft has repeatedly refused to reveal whether it disagrees with those interpretations. For example, following recent testimony by Microsoft's counsel, Charles Rule, before the Senate Judiciary Committee, members of the Committee posed a series of questions to Mr. Rule regarding whether Microsoft agreed with the Department's interpretation of the RPFJ as set forth in the Competitive Impact Statement. Mr. Rule's responses were telling. When asked a series of questions directed to whether "Microsoft disagree[d] with anything stated in the Department's Competitive Impact Statement concerning the meaning and scope of the proposed Final Judgment," Mr. Rule refused to answer the questions directly, instead repeatedly referring to the same "non-answer":

> Microsoft did not participate in the preparation of the Competitive Impact Statement. The language of the Revised Proposed Final Judgment was carefully negotiated and means what it says. The Department's Competitive Impact

[35] *Id.* at 539-40 (emphasis added).

[36] *Id.* at 541-42.

> Statement has the same legal force and effect in this case as in any other. Beyond that I cannot go in light of the facts that the Tunney Act proceeding is currently under way before Judge Kollar-Kotelly and that the non-settling states are attempting to raise various issues concerning the Competitive Impact Statement as part of the ongoing "remedies" litigation also before Judge Kollar-Kotelly. Once that litigation is completed, I may be in a better position to discuss these issues with the Committee.[37]

Microsoft's clear strategy is to refuse to reveal anything about its interpretations of the RPFJ prior to the Court's entry of the judgment, lest it become clear to both the Department and the public that Microsoft's understanding of its potential obligations under the RPFJ is substantially different from the Department's. Then, when disputes with the Department about the scope of its obligations arise, as they inevitably will, Microsoft will be free to argue that the RPFJ is ambiguous, and therefore must be construed, as a matter of law, in Microsoft's favor.[38]

While it certainly is in Microsoft's interest to pursue such a strategy, the Department should not risk being complicit in a scheme that would effectively mislead the Court and the public about the true nature and impact of the RPFJ. The Department should insist that Microsoft identify any and all disagreements that it has with the interpretations offered by the Department in the Competitive Impact Statement prior to entry of the RPFJ. Absent such an inquiry and a record of Microsoft's position, the District Court, Sun, and the public at large have no assurances that the terms of the RPFJ will actually be construed in the manner proposed by the Department in its Competitive Impact Statement.

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[37] Responses of Charles F. Rule to Judiciary Committee Questions at 13.

[38] *See Microsoft*, 980 F. Supp. at 541 ("The Court must resolve any ambiguities in the terms of the Final Judgment in favor of Microsoft, the party charged with contempt."); *see also Cause v. Nuclear Regulatory Comm'n*, 674 F.2d 921, 927-28 (D.C. Cir. 1982).

B. "Interoperate" and "interoperating" must be defined

The key disclosure provisions contained in the RPFJ rely on the terms "interoperate" and "interoperating" to define the scope of Microsoft's obligations, but these critical terms are not expressly defined.

Section III.D of the RPFJ would require Microsoft to disclose "for the sole purpose of ***interoperating*** with a Windows Operating System Product . . . the APIs and related Documentation that are used by Microsoft Middleware to ***interoperate*** with a Windows Operating System Product." (emphasis added).

Section III.E would require Microsoft to:

> make available for use by third parties, for the sole purpose of ***interoperating*** with a Windows Operating System Product, on reasonable and non-discriminatory terms . . ., any Communication Protocol that is . . . (i) implemented in a Windows Operating System Product installed on a client computer, and (ii) used to ***interoperate*** natively (i.e., without the addition of software code to the client operating system product) with a Microsoft server operating system product.

(emphasis added).[39]

Depending on the definition of these terms, the scope of Microsoft's obligations under these provisions could vary dramatically. Therefore, in order to avoid a reprise of the litigation surrounding the 1995 consent decree with Microsoft, the Department should clarify the meaning of these terms in the text of the RPFJ, particularly since any ambiguity is likely to be construed in Microsoft's favor in any enforcement action brought by the Department.

An explicit definition of these terms is essential because Sun believes the Department and Microsoft likely attach very different meaning to these terms.

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[39] *See also* Section III.H (providing that a Windows Operating System Product may invoke a Microsoft Middleware Product in any instance in which "that Microsoft Middleware Product would be invoked solely for use in ***interoperating*** with a server maintained by Microsoft (outside the context of general Web browsing)").

For example, in the Competitive Impact Statement, the Department offers a number of broad characterizations regarding the scope of these interoperability disclosures:

- "[I]f a Windows Operating System Product is using all the Communications Protocols that it contains to communicate with two servers, one of which is a Microsoft server and one of which is a competing server that has licensed and fully implemented all the Communications Protocols, the Windows Operating System Product should behave identically in its interaction with both the Microsoft and non-Microsoft servers."[40]

- "Section III.E. will permit seamless interoperability between Windows Operating System Products and non-Microsoft servers on a network. For example, the provision requires the licensing of all Communications Protocols necessary for non-Microsoft servers to interoperate with the Windows Operating System Products' implementation of the Kerberos security standard in the same manner as do Microsoft servers, including the exchange of Privilege Access Certificates. Microsoft must license for use by non-Microsoft server operating system products the Communications Protocols that Windows Operating System Products use to enable network services through mechanisms such as Windows server message block protocol/common Internet file system protocol communications, as well as Microsoft remote procedure calls between the client and server operating systems."[41]

- "Section III.D of the proposed Final Judgment requires Microsoft to disclose to ISVs, IHVs, IAPs, ICPs and OEMs all of the interfaces and related technical information that Microsoft Middleware uses to interoperate with any Windows Operating System Product. . . . Microsoft will not be able to hamper the development or operation of potentially threatening software by withholding interface information or permitting its own products to use hidden or undisclosed interfaces."[42]

In light of these comments, the Department appears to be interpreting "interoperate" to mean the ability of two different products to access, utilize, and support the full features and functionality of one another. Under the Department's interpretation, the disclosures would be of sufficient detail to allow a non-Microsoft server operating system to implement the Microsoft Communication Protocols in a manner such that the non-Microsoft server operating system could

[40] CIS at 38.

[41] CIS at 38-39.

be substituted for a Microsoft server operating system without any disruption, degradation, or impairment of all the features, functionality, and services of any Microsoft PC operating system connected to such non-Microsoft server operating system.

By contrast, in proceedings before the European Commission, Microsoft has asserted a much narrower interpretation of "interoperate" than the Department's interpretation. In that forum, Microsoft has maintained it already discloses all information necessary to achieve interoperability between Microsoft's PC operating system and non-Microsoft server operating systems. Since Microsoft contends that they already disclose all of the information necessary to satisfy this narrow definition of "interoperate," if this definition were to prevail, Microsoft will disclose nothing new. Its conduct will remain unchanged.

Under Microsoft's narrow definition, interoperability is a one-way street that is satisfied if all of the functionality of a non-Microsoft server operating system can be accessed from a Windows PC operating system. In contrast to the Department's position, Microsoft has repeatedly taken the position that interoperability does not require a disclosure sufficient to allow a Windows PC operating system to behave identically when connected to both Microsoft and non-Microsoft server operating systems. Moreover, Microsoft has previously claimed that "interoperability" relates only to those protocols and interfaces which Microsoft has chosen to document and make available to third parties, and should not include protocols and interfaces that Microsoft reserves for itself to use to connect its PC and server operating system products.

Absent an explicit definition of this critical term in the RPFJ, Sun believes the disclosure provisions of the RPFJ are doomed to fail. To avoid future disputes over the meaning of this term and to ensure that the public actually receives a remedy that is consistent with the

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[42] CIS at 33.

Department's representations in the Competitive Impact Statement, Sun proposes that the RPFJ should be amended to include the following definition:

> "Interoperate" or "Interoperating" means the ability of two different products to access, utilize and/or support the full features and functionality of one another in all of the ways they are intended to function. For example, a non-Microsoft operating system installed on a server computer "Interoperates" with a Windows Operating System Product installed on a Personal Computer if such non-Microsoft server operating system can (a) be substituted for a Microsoft operating system running on a server computer connected to a Personal Computer running a Windows Operating System Product, and (b) provide the user of the non-Microsoft server operating system the ability to access, utilize and/or support the full services, features and functionality of the Windows Operating System Product that are accessed, utilized and/or supported by such Microsoft server operating system without any disruption, degradation or impairment in such services, features and functions.

C. The scope of Microsoft's "Communication Protocols" disclosure should be clarified and exemplified

As a vendor of server operating systems that must connect and communicate with Microsoft's monopoly PC operating system, the disclosure and licensing provisions in Section III.E relating to Microsoft's Communications Protocols are especially important to Sun's business. Although the term Communications Protocols is expressly defined, the RPFJ lacks any explicit examples regarding which Microsoft technologies would currently be required to be disclosed or what the extent of such disclosure would be in practice. While the terms of the RPFJ must be written to anticipate Microsoft's future conduct, there is no excuse for misunderstandings regarding Microsoft's obligations with respect to known, existing interoperability barriers. Because the technical terms surrounding this provision are potentially subject to varying interpretations, the RPFJ would be substantially improved if it gave better guidance on how these provisions would actually be applied in practice.

For example, in its Competitive Impact Statement, the Department identifies some of the specific protocols it believes Microsoft will be required to disclose under Section III.E to the

extent such protocols are implemented in Microsoft's PC operating system products, including: protocols relating to Microsoft's Internet Information Services ("IIS") web server and Active Directory, Microsoft's implementation of the Kerberos security standard (including the exchange of Privilege Access Certificates), the Windows server message block protocol, the Windows common Internet file system protocol, Microsoft remote procedure calls between the client and server operating systems, and protocols that permit a runtime environment (*e.g.*, the Common Language Runtime) to receive and execute code from a server.[43]

Microsoft, however, has refused to say whether it agrees with the Department's interpretation. To avoid future disputes and ensure that the parties agree on the kinds of protocols that will fall within the scope of the term "Communications Protocols," the RPFJ should be amended to identify particular examples of protocols that Microsoft would be required to disclose. Furthermore, in advance of entry of the RPFJ, Microsoft should be required to fully detail what it will disclose with regard to existing Communications Protocols that pose a barrier to interoperability. At a minimum, the Department should require Microsoft to identify any disagreements Microsoft has with the Department's interpretation of this provision prior to entry of the RPFJ. Unless the Department and Microsoft go through the exercise of attempting to apply this provision in practice, the public cannot be assured that there truly has been a "meeting of the minds" regarding the scope and meaning of this important provision.

Not only should the Department clarify the RPFJ with examples of particular protocols that Microsoft currently would be required to disclose, the Department also should clarify the kinds of information Microsoft will be required to disclose regarding its Communications Protocols. Although the term Communications Protocols appears to be defined broadly in

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[43] CIS at 37-39.

Section VI.B of the RPFJ, in practice, the actual application of these provisions is likely to give rise to many potential questions and disputes. For example,

- Is everything that is shipped with Microsoft Windows server operating system products (*e.g.*, Windows 2000 Server, Windows 2000 Advanced Server, etc.), including Microsoft's Active Directory or IIS, part of the "server operating system," and therefore potentially the subject of disclosure to the extent it comprises a "Communications Protocol"?

- Are Active Directory, Kerberos security protocol, COM+, Dfs, DLT, CIFS extensions, RPC, the Win 32 APIs, or Passport examples of "Communications Protocols" that must be disclosed and licensed pursuant to Section III.E of the RPFJ?

- Where Microsoft has extended an industry standard like Kerberos, will Microsoft be required to disclose both the standard portion of its implementation and its proprietary extensions?

- Will Microsoft be required to disclose the details regarding its proprietary implementation of the Kerberos security protocol in Windows 2000 and Windows XP Professional, including the information necessary for a non-Microsoft server to be able to generate, exchange, and process the authentication and authorization data in Privilege Access Certificates?

- What does "make available for use by third parties" mean in practice in the context of Section III.E? Will Microsoft be required to just disclose fields, formats, etc., or will it be required to disclose sufficient information to allow a competitor to create its own implementation of the Communications Protocol that will allow a competitor's server operating system to seamlessly interoperate with the Windows PC operating system in the same manner as a Microsoft server operating system?

Unless such questions are resolved and clarified in advance of entry of the RPFJ, the disclosure and licensing obligations of Section III.E will not provide any meaningful relief.

D. The scope of the "carve-out" provisions of Section III.J should be clarified

Particularly troubling to Sun is the possibility that the "carve-out" provisions of Section III.J might be broadly construed by Microsoft to exclude many of the kinds of disclosures that would otherwise fall within the scope of Sections III.D and III.E. Section III.J.1 provides that no provision of the Final Judgment shall:

> [r]equire Microsoft to document, disclose or license to third parties: (a) portions of APIs or Documentation or portions or layers of Communications Protocols the disclosure of which would ***compromise the security of a particular installation or group of installations*** of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria . . . .

(emphasis added).

In the Competitive Impact Statement, the Department characterizes this exception as a "narrow one, limited to specific end-user implementations of security items such as actual keys, authorization tokens or enforcement criteria, the disclosure of which would compromise the security of 'a particular installation or group of installations' of the listed security features."[44] But nowhere in the RPFJ is the term "compromise the security of a particular installation or group of installations" defined. What will this provision mean in practice? With respect to known interoperability problems relating to Active Directory, Microsoft's Kerberos security model, Windows Media Player, or the Passport authentication/authorization service, what portions of those protocols and interfaces can Microsoft refuse to disclose pursuant to this provision? If Microsoft refuses to disclose such information, will competitors be able to fully interoperate with all of the features and functionality of the Windows operating system, or will the value of the disclosure provisions be effectively eviscerated? What steps has the Department taken to ensure that, in practice, this exception will not swallow the intended effect of the disclosure provisions?

Again, unless such questions are clarified in advance of entry of the RPFJ, Microsoft is likely to use this purportedly narrow exception to eviscerate its disclosure and licensing obligations under the RPFJ.

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[44] CIS at 39.

E. The definition of "Microsoft Middleware Product" should be amended

The definition of "Microsoft Middleware Product"[45] in the RPFJ is fundamentally flawed because it grants Microsoft discretion to limit its obligations merely based on the way it chooses to trademark its products. For middleware functionality that is distributed after entry of the Final Judgment, except for a small, specified class of middleware applications (*e.g.*, Internet browsers, email client software, etc.), Microsoft's obligations under the RPFJ are not triggered unless it chooses to distribute the middleware product under a trademark other than "Microsoft®" or

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[45] The RPFJ defines "Microsoft Middleware Product" as follows:

1. the functionality provided by Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product, and

2. for any functionality that is first licensed, distributed or sold by Microsoft after the entry of this Final Judgment and that is part of any Windows Operating System Product

    a. Internet browsers, email client software, networked audio/video client software, instant messaging software or

    b. functionality provided by Microsoft software that –

        i is, or in the year preceding the commercial release of any new Windows Operating System Product was, distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product;

        ii. is similar to the functionality provided by a Non-Microsoft Middleware Product; and

        iii. is Trademarked.

Functionality that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack, upgrade, or bug fix for Internet Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.

"Windows®."[46] *In other words, after entry of the RPFJ, if Microsoft bundles its new middleware* runtime alternative to the Java platform, the .NET Framework (also known as the Common Language Runtime) with Windows, it only would have to make disclosures about the APIs used by the .NET Framework or allow OEMs and consumers to remove access to it, if it chose to distribute the .NET Framework under the trademarked name ".NET Framework." If it simply distributed the product under the name "Microsoft® .NET Framework," its activities would appear to be unconstrained by the RPFJ. To allow Microsoft to evade its obligations under the RPFJ based on arbitrary trademarking practices is absurd.

To avoid this result, the definition of "Microsoft Middleware Product" should be amended as follows: the "Trademarked" requirement of Section VI.K.2.b.iii should be stricken; the terms ".NET Framework" and "Common Language Runtime" should be added to Section VI.K.1; and the term "middleware runtime environment" should be added to Section VI.K.2.a.

V. Section III.I's Licensing Provisions Allow Microsoft to Profit from Its Unlawful Acts

A. Microsoft should not be allowed to demand royalties as a condition for making interoperability disclosures

The licensing provisions of the RPFJ are fundamentally flawed because they would require the public to pay royalties to Microsoft in order to interoperate with Microsoft's illegally maintained monopoly products. If Microsoft had not engaged in its pattern of illegal conduct, its monopoly would have begun to dissipate, and it would have been unable to collect this "interoperability" tax. As the Department itself previously recognized, "[i]f Microsoft were in a competitive market, it would disclose its confidential interface information to other server software developers so that their complementary software would work optimally with, and

[46] *See* RPFJ, Sections VI.K and VI.T.

thereby enhance the value of, Microsoft's PC operating systems."[47] It is only because Microsoft has illegally maintained its PC operating system monopoly and wishes to expand its monopoly to server operating systems that Microsoft has an incentive to withhold information from competitors regarding complementary software. Thus, the RPFJ, in effect, authorizes Microsoft to collect a portion of its monopoly rents through this licensing regime.

Furthermore, not only is Microsoft authorized to collect royalties for the "privilege" of interoperating with its illegal monopoly, the RPFJ places no limits on how high a royalty Microsoft can demand, other than the royalty must be reasonable. However, since competitors' products must be able to interoperate with Microsoft's monopoly PC operating systems, they may be constrained to essentially pay whatever Microsoft demands.

To ensure Microsoft does not continue to enjoy the fruits of its illegal conduct, Section III.I of the RPFJ should be amended to require Microsoft to grant any licenses required under the RPFJ on a royalty-free basis.

B. Microsoft has too much discretion over licensing terms under the RPFJ

Although Section III.I of the RPFJ places some limitations on the terms under which Microsoft must license its technology to facilitate the disclosure obligations of the RPFJ, Microsoft retains broad discretion, which it is likely to exploit.

For example, Section III.I.1 requires that all license terms be "reasonable." A reasonableness standard, however, provides little practical guidance, and is a particularly poor choice in the case of a monopolist like Microsoft who has repeatedly broken the law to secure commercial advantages over its competitors. Similarly, the fact that licenses must be "non-discriminatory" could actually be exploited by Microsoft to ensure that its strongest competitors

[47] 4/28/00 Plaintiffs' Memo. in Support of Proposed Final Judgment at 28.

are denied access to Microsoft's disclosures. For instance, a small start-up company with no revenues and no existing intellectual property rights might be willing to agree to terms that would be commercially unacceptable to significant Microsoft competitors like Sun, IBM, or Novell.

The terms of the RPFJ also allow Microsoft the ability to substantially delay making any interoperability disclosures. Under Section III.E, Microsoft does not even need to make its Communications Protocols available until nine months after submission of the RPFJ. But since Microsoft can insist that third parties enter into a license agreement before they receive any disclosures, Microsoft can continue to delay making disclosures to key competitors by dragging out negotiations and insisting on commercially unacceptable terms.

Does the Department intend to review ongoing negotiations to ensure Microsoft is taking reasonable positions in the negotiations? How will the Department ensure that Microsoft does not exploit the negotiating process to facilitate delay and disadvantage key competitors? Will Microsoft's competitors be forced to sign license agreements before they know the scope of information that Microsoft will or will not disclose? Does the Department expect that the proposed Technical Committee will be involved in resolving such disputes? If so, will Technical Committee members have the requisite licensing and legal experience to assess whether Microsoft is insisting upon commercially unreasonable terms?

To ensure Microsoft cannot circumvent the intent of the RPFJ, Sun proposes that the RPFJ be amended to include a publicly available template identifying the terms under which Microsoft will license its technology pursuant to the RPFJ. In principle, this approach is analogous to Section III.B which requires Microsoft to have uniform license agreements with OEMs in accordance with published, uniform royalty rates. Requiring Microsoft to identify this

license template in advance would serve two important objectives. First, it would help limit Microsoft's ability to evade the intent of the RPFJ through negotiation tactics. Second, it would allow the public to understand the true costs and conditions of licensing under the RPFJ in advance of entry of the RPFJ. Unless the material licensing terms are specified in advance, neither the Department nor the public can accurately assess the actual commercial significance of the proposed disclosure obligations.

C. Microsoft should not be allowed to force third parties to forfeit their intellectual property claims against Microsoft

Section III.I.5 provides that third parties "may be required to grant to Microsoft on reasonable and nondiscriminatory terms a license to any intellectual property rights it may have relating to the exercise of their options or alternatives provided by this Final Judgment." In other words, Microsoft would be free to infringe a third party's patents or copyrights, or steal its trade secrets, and then by virtue of its monopoly position, force such third party to grant Microsoft a license to do so as the price that third party must pay in order to interoperate with Microsoft's monopoly product. If Microsoft wished to obtain rights to practice or use a competitor's intellectual property, it could do so simply by incorporating that technology into Windows, then insisting on both a royalty and a grant-back license as the consideration that competitor must provide in order to enable its products to interoperate with Microsoft's monopolized PCs. Indeed, Microsoft's competitors would have to license Microsoft the right to whatever intellectual property Microsoft may have incorporated into Windows even before they know what intellectual property Microsoft has stolen or infringed. No other company has such power, let alone governmental blessing and endorsement, to extort such concessions.

Sun therefore proposes that the RPFJ be amended to strike Section III.I.5 in its entirety.

VI. Conclusion

The RPFJ fails to remedy the continuing competitive harm resulting from Microsoft's actions, and instead improperly accedes to Microsoft's illegally maintained and expanded monopoly power. The Department should withdraw its support for the RPFJ, and instead pursue remedies that will restore competition to the PC operating system market, prevent Microsoft from expanding its monopoly in that market into adjacent and downstream markets, and redress the harm to competition caused by Microsoft's illegal acts. At a minimum, the Department should seek to remedy directly the specific harm to competition caused by Microsoft's illegal acts against the Navigator browser and the Java platform, which formed the very heart of the Department's case against Microsoft.

Because critical terms in the RPFJ are undefined or ambiguous, the Department also should assure the public that Microsoft is bound by the interpretation of the RPFJ set forth in the Department's Competitive Impact Statement.

Finally, the Department should delay seeking entry of the RPFJ until the completion of trial on the remedies sought by the Department's co-plaintiffs, the Litigating States. Sun believes that the evidentiary record from that trial is likely to demonstrate the substantial flaws and inadequacies of the RPFJ and cause the Department to seriously re-consider whether its support for the RPFJ is in the public interest.

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